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ABSTRACT

In a pilot study based on a technique to assess the dimensions of self concept held by young children, 38 lower socioeconomic status Negro and 36 upper-middle socioeconomic status white four-year-old children were given the Brown-IDS Self Concept Referents Test, and retested after three weeks; there was a relatively high level of reliability in the perceptions of self held by Negro and white children in the three-week interval. Subjects tended to perceive themselves--and to see significant others as seeing them--in generally positive ways. However, Negro subjects scored significantly lower, on the average, than white subjects. Both Negro and white subjects reportedly held high positive perceptions of the ways in which they are seen by their mothers and their peers. Subjects who perceived themselves positively tended to see others as perceiving them positively, as was the case with negative perceptions. These results must be evaluated cautiously, however, due to several possible defects in research design. [Not available in hard copy due to marginal legibility of original document.] (EM)

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The Assessment of Self Concept Among Four-Year-Old Negro and White Children:
A Comparative Study Using the Brown-IDS Self Concept Referents Test*

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Bert R. Brown, Ph.D.

INSTITUTE FOR DEVELOPMENTAL STUDIES
School of Education
New York University
New York, New York

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The Assessment of Self Concept Among Four-Year-Old Negro and White Children:

A Comparative Study Using the Brown-IDS Self Concept Referents Test

by

Bert R. Brown

Introduction

Researchers have had considerable difficulty in reliably assessing the dimensions of self concept among children younger than five or six years of age. These difficulties are due to several factors, the most prominent of which are: (a) a generally limited ability, among very young children, to clearly verbalize complex self feelings and perceptions, and (b) a marked tendency for young children to alter perceptions of self as a function of the diverse biological and interpersonal forces which act on them from day to day. It has thus been argued by some that the young child's perceptions of himself are highly fluid and that they change over short periods of time. Some characterize this as a developmental progression from the holding of relatively unstable self perceptions, in early childhood, to the appearance of more stable, enduring concepts of self reached in adulthood.

Another major source of difficulty in the assessment of self concept among young children stems from the devices and procedures on which we have come to rely. A major review of the literature on the measurement of self concept (Wylie, 1961) strongly suggests that while innumerable techniques have been developed for use with adults, there has been an apparent paucity of thought among psychologists in the area of self concept measurement of young children (Piers and Harris, 1964). We have tended to rely on downward revisions of techniques designed to assess self concept among adults rather than turning the many theories on the developmental aspects of self concept into operational utility in the form of standardized measurement procedures.

The result is that these adapted procedures are often of limited use with young children due to their dependence on the ability of the subject to explore his feelings about himself in depth and to verbally report the essence of these self feelings to an adult. Projective techniques such as those which are modelled on the presentation of ambiguous pictorial stimuli, open-ended sentence stems and unembedded words designed to promote free association have been widely used with adults to gain understanding about self feelings. They generally yield rich and extensive data about the ways in which adults perceive both themselves and others, and about their characteristic orientations to life in general. One primary reason why these techniques have been so useful with adults is that adults generally possess the necessary cognitive and verbal abilities required to express complex self feelings. These abilities enabling the clear verbalization of complex self feelings are, in large extent, undeveloped in very young children, although there are individual differences to be found among them in this respect. This difficulty in adapting techniques primarily designed for measurement among adults is sorely felt in the use of such techniques with very young children.

Perhaps the major indicator of such difficulty occurs where there is a need to impose gross psychological interpretations on responses given by children to ambiguous stimuli. Consider the following: One young child, when given the open-ended sentence stem, "When I look in the mirror I see..." responded: "a tiger." How can we deal with this type of response without relying on subjective interpretation in order to group this response with others considered to be similar? How can this type of response be distinguished from other equally unclear responses? We could, for example, argue that the child perceived himself as an animal, as distinguished from some inanimate object. Or, we could make a further distinction and develop an interpretation around the fact that the child perceived himself as a feline animal. Or, further, we could even assert that this particular child identified himself as a lithe, ferocious animal, thereby imputing specific characteristics to his response.

The important and essentially unanswered question about the response cited above still remains: what specific knowledge have we gained about the child from his response? Further, what testable hypotheses can we develop about the way the child perceives himself from the data which he has provided? Finally, with what level of confidence can generalizations be made about self concept, given the emergence of this type of data from a group of young children? It is obvious that examiners must probe this type of response, but if there are realistic limits on young children's ability to express complex self feelings, then probing may nevertheless leave much to be desired in the way of response clarity and reliability. In addition, examiners must exercise great caution in freeing their interpretations from "own" subjective biases.

Additional, but not unrelated, pitfalls in the measurement of self concept among very young children stem from: (a) limited attention span; (b) frequent noncomparability of responses across children; and (c) a commonly found tendency to incorporate aspects of the immediate physical environment into their responses to ambiguous questions. A simple example will suffice to illustrate the latter two problems.

Again, in response to the open-ended sentence stem, "When I look in the mirror, I see..." a six-year-old child said: "...a watermelon seed." Another child responded, "...a drop of water." These two cases present an insoluble problem of noncomparability. How can either of these two responses be classified as either similar to or different from one another? How can either of these responses be compared to the "tiger" response cited earlier? In any case, a great deal of interpretation must be imposed on these responses before they can be given any comparative value or meaning.

Interestingly, the child who responded: "...a drop of water." was examined in a small room which had a sink and dripping water faucet nearby. It is not unreasonable to assume that the subject incorporated an element of his immediate physical environment into his response. I have examined a content analysis of several hundred protocols of first graders' responses to similar open-ended sentence stems, and have observed a number of responses which suggest that this process was indeed operative.

These difficulties may be reflected in marked response changes over short periods of time. Response instability, in turn, may be viewed in at least two different ways: first, one may interpret response instability as evidence of unreliability in a given measurement procedure. Alternately, one may argue that the many concepts of self held by young children do indeed shift, and should reasonably be expected to change over short periods of time.

Ideally, then, the most valid and useful type of technique to measure the dimensions of self concept among very young children should:

1. minimize the extent to which psychological interpretation must be imposed upon obtained responses,
2. maximize comparability of responses between children in order to permit generalization, and
3. test directly the stability of responses over a specified period of time.

In addition, it would also be important to consider the limited attention span which is characteristic of young children and to exercise rigorous control over the physical conditions under which assessment is taken. Finally, an empirical measure of the degree to which the instructions, item content and overall procedures are understood by subjects is required. The major implication of these requisites is that the entire procedure should be easily comprehensible to young children.

The major purposes of this paper will be:

1. to examine some pertinent research on the measurement of children's concepts of self,
2. to outline a technique which has been designed to assess some dimensions of self concept held by four-year-old children, and
3. to report the results of a pilot study in which this technique was used with 74 Negro and white children.

Since the theoretical anchorage for the technique comes from G. H. Mead's (1956) model of the development of self-awareness, a brief examination of that theory will be undertaken.

Examination of Some Pertinent Literature

Self concept has been variously defined by different psychologists. Perkins (1958a) has argued that at the base of self concept are those perceptions, beliefs, feelings, attitudes, and values which one takes as descriptive of himself. In similar terms Jersild (1952) defined self concept or the "self" as a "composite of thoughts and feelings which constitute a person's awareness of his individual existence, his conception of who and what he is." (p. 9) Rogers (1951) argues that the "...self concept or self structure may be thought of as an organized configuration of the perceptions of the self which are admissible to an awareness. It is composed of such elements as the perceptions of one's characteristics and abilities, the percepts and concepts of the self in relation to others and to the environment." (pp. 136-137)

These statements of definition suggest that an individual forms impressions of himself from his perceptions of others' responses to him. This, in turn, implies that self concepts are formed from experiences in direct social interaction with others. There is, however, a less direct type of social experience which influences one's concepts of self. Specifically, one's perceptions of his own characteristics and abilities, counterposed against the dominant cultural values and status distinctions which operate in a given social environment, will also influence his evaluations of himself.

It is interesting that of the research which has been done with children in this area a major portion has been concerned with the deleterious affects of "disadvantaged" social environments on the development of self concept. Empirical studies on differences in self concept between Negro and white children suggest that Negroes generally tend to see themselves in less positive ways than do whites. Theorists such as Clark (1963a), Ausubel and Ausubel (1963), Katz (1964), and Deutsch (1963) have cited several reasons why disadvantaged Negro children adjust poorly to school and fail to achieve. Prominent among these reasons are the Negro child's lack of self confidence and his self perceptions of inadequacy or inferiority to his white classmates.

Some investigators have reported that negative self concepts and expectations of failure can be found among children as early as four years of age or younger. Horowitz (1939) reported that two-year-old Negro children were not only highly aware of differences between themselves and white children, but that they also tended to wishfully misidentify themselves as white more frequently than they correctly identified themselves as Negro. White children of the same age, on the other hand, almost always identified themselves correctly as white.

Clark and Clark (1958), in a now classic study, presented white and Negro dolls to 250 Negro children and asked them to choose the dolls which they most wanted to play with and which were most like themselves in appearance. They found a general tendency for Negro children to prefer white dolls and to reject Negro dolls. When they differentiated within their sample by lightness-darkness of skin color, they found this tendency to be most pronounced among light-skinned Negro children and that it was least pronounced among dark-skinned Negro children. It should be noted that while a majority of Negro children at each age level preferred the white to the brown dolls this preference decreased with increase in age (from four to seven years). In addition, these investigators found that doll preference was significantly affected by both the geographic region in which the subjects lived, and by the extent to which segregation was practiced in the schools which they attended. Southern Negro children in segregated schools had a less pronounced preference for white dolls while the Northern Negro children in mixed schools had the greatest preference for the white dolls. These authors concluded that Negro children at three to seven years of age are clearly able to perceive negative cultural values attached to skin color, as measured by doll preference, and that this is reflected in negative concepts of self.

In a study of "racial awareness" Goodman (1952) found that four-year-olds have "an entrenched system of race related values." (p. 29) Goodman found that a significant proportion of Negro children believed that "whites are prettier than Negroes" (p. 37) while among white children she found that "To wish to be like a colored child, or even to admire any of his distinctive physical attributes is very rare." (p. 47) Goodman differentiated within her sample of four-year-old children by extent of "awareness" of physical differences between Negro and white

children. She found that four-year-olds with high racial awareness frequently used negative terms and epithets in descriptions of themselves, that they had a "deep sense of racial differentiation and separation and that they tended to sense their own race status or the status of others as threats." (p. 37) These data led Goodman to conclude that four-year-old children, in general, show unmistakable awareness of both "own" and others racial characteristics. The unavoidable implication of this study is that children's racial characteristics will have profound effects on their concepts of self, but the linkage between these two factors is left unexplored.

The process by which "awareness" of own attributes becomes translated into self concepts was discussed by G. H. Mead (1956). His theory anchored the development of self-awareness in social interaction. "The self," he argued, "is not initially present at birth but arises in the process of social experience. It develops, in a given individual, as a result of his relations to the social system as a whole and to other individuals within that social system." (p. 212) Mead further argued that the individual experiences himself not directly, but in an indirect fashion, from his perceptions of the particular standpoints of other members of the same social group toward him, or from the generalized standpoint of the social system in which he functions. In other words, the individual becomes an "object" to himself by taking the attitudes of other individuals toward himself.

Social perception occupies a crucial place in Mead's theory of self-awareness. The individual functions within a social matrix, and his perceptions of others perceptions of him become the basic data from which concepts of self are formed. These perceptions need not correspond exactly to the ways in which the individual is actually regarded by others, since varying degrees of distortion and selectivity in perceptions of the real world are produced by an individual's needs, motivations and past experiences. Mead further argued that the development of self-awareness is not only determined by one's perceptions of the attitudes of specific others toward him, but that it is also a result of the prevailing attitudes and values normatively held by the social group to which he belongs. He identified the more general influence of the social environment on self-awareness as the effect of the "generalized other," and he viewed the generalized other as a referent

against which one evaluates himself. In addition, Mead thought of the generalized other as a standard of acceptable social values which is responsible for the attribution of positive or negative values, by the individual, to his own characteristics.

It is important to explicitly recognize that one's social experience, his relations with others, his perceptions of himself and of his place in the social order, as well as his moods and temperament, are subject to change over time. At the same time it is reasonable to assume that certain dominant or pervassive themes may remain relatively unaltered throughout long periods of an individual's life. In addition, we must recognize that our conceptions of ourselves are no doubt multidimensional rather than unidimensional and that the many different components of our self awareness are derived from:

1. the actual perceptions that others have of us,
2. our perceptions of the ways in which we are seen by others,
and
3. others' perceptions of the ways in which we perceive ourselves.

It can also be argued that among the "others" with whom an individual interacts, some are likely to be more influential or salient than others. One thus attaches differential importance to the ways in which he supposes he is seen by others as a function of their importance to him. From this it follows that:

Our perceptions of ourselves are basically derived from our perceptions of the behavior of others toward us. Greater weight is given to the ways in which we suppose "significant" others respond to us and less weight is given to responses made to us by those who are less important.

The "subjective" and "objective" components of self concept discussed by Mead are easily distinguishable in this formulation. On the one hand the "self as subject" component consists of those feelings of intrinsic self worth held by an individual about himself. On the other hand, the "self as object" component consists of the perceptions which one has of the ways in which he is seen by "significant" others in his life. These "significant others" have an important function in the formation of concepts of self. They serve as "referents" from whom one continually seeks and receives information about his appearance

in their eyes. The data which one receives about the ways in which he is seen by these referents becomes the basic material upon which perceptions of self as a social "object" are built. Thus, the explicit assumption which is being made in this paper is that an individual will tend to form impressions of himself, of his characteristics and of his capacities from information which he receives from referents about the ways in which they see him.

This formulation provides the theoretical basis on which a new technique has been developed for the specific purpose of assessing self concept among young children.

The Technique

Let us assume that in the case of the young child a great number of "significant others" (referents) can be identified. However, for operational purposes we shall assume that the following three referents are normally highly salient, and strongly influence the ways in which children perceive themselves:

1. the child's mother,
2. the child's teacher, and
3. the child's peers (classmates).

The questions which we now want to ask of children are:

1. How do you suppose your mother perceives you?
2. How do you suppose your teacher perceives you?
3. How do you suppose your classmates perceive you?

An important fourth question is also suggested by this framework:

4. How do you perceive yourself?

Taken together, the former three questions clearly resemble Mead's "self as object" component of self concept, and the fourth resembles his "self as subject" component.

In this technique the child (S) is required to assume the perspective of each one of these significant others toward himself. He is then asked to report his perceptions of the views of him held by each one of these referents on fourteen descriptive dimensions. The descriptive dimensions are constant across all "object" and "subject" referents. Ss are thus required to characterize themselves from their own view and from their perceptions of the ways they are seen by mother, teacher, and "other kids in the class."

A crucial requisite in this procedure revolves around the young child's ability to take the role of others toward himself. At first glance it would seem that inducing a young child to take the role of another toward himself might be a difficult task. However, we have developed a simple induction which appears to work well. This induction requires that a photograph be taken of each S against a standard, preferably neutral lightcolored background, with standardized instructions for posing. The photograph should be a full-front pose, taken from approximately six feet, with the S placed in the center foreground of the picture. The child is presented with the photograph of himself in order to assist him to gain "objectivity" about himself. "Objectivity" is defined here as perception of the self as an "object."

Since there is a need for immediate availability of the photograph, we have used a Polaroid camera, equipped with a "wink" flash unit which produces completely developed three by four inch prints within fifteen seconds after exposure. The process involved in developing prints is entirely automatic and the camera is quite simple to operate. After taking the photograph, Ss are asked to report:

1. their perceptions of the ways in which they suppose they are seen by each of the "significant other" referents, and
2. their perceptions of themselves.

A core of fourteen bipolar adjectival items constitutes the dimensions on which Ss must report both their own perceptions of self and their perceptions of significant others' perceptions of them. The set of descriptive items was pilot tested and subsequently modified to assure that the items were easily comprehensible to four-year-old Ss. These items are stated in the vocabulary of four-year-old children. All items are presented in an "either-or" item format, the more socially desirable choice being scored "1" while the less socially desirable choice is scored "0". These items are given in Table 1.

Ss are asked to report their perceptions of themselves and their perceptions of their mothers', teachers', and peers' perceptions of them on each of these items. The set of items is thus repeated four times and the only factor which is varied is the referent against which the items are cast. This procedure can be easily illustrated

with the following example. Imagine that an S's name is Johnny Gallagher, the items would be presented as follows:

1. Now tell me, is Johnny Gallagher happy or is he sad?
2. Now tell me, is Johnny Gallagher clean or is he dirty?
3. Is Johnny Gallagher good looking or is he ugly?

An examiner (E) would proceed through the entire set of items, prefacing each question with the phrase "Is Johnny Gallagher...?" Following this, the referent is shifted and it becomes: "Now tell me, does (insert name of Johnny Gallagher's teacher) think that Johnny Gallagher is happy or sad? Does (teacher's name) think that Johnny Gallagher is clean or dirty?" After proceeding through the entire set of items, the referent is again shifted, and becomes: "Now tell me, does Johnny Gallagher's mother think that he is...?" Finally the referent is again shifted and becomes: "Do the other kids in the class think that Johnny Gallagher is...?"

Each question is asked with specific reference to the photograph which has been taken of S. Thus, as E asks each question he points to the picture of S, directing S's attention to the photograph of himself.

Since the procedure outlined above is a repetitive one, and due to limitations on the attention span typical of four-year-old children, the four referents cannot realistically be administered to Ss on one occasion. Instead, the "self" and "mother" referents are administered at the first examination and the "teacher" and "peer" referents are administered three weeks later.

The three week interval has been used to permit a measure of retest reliability. Thus, in addition to the administration of the "teacher" and "peer" referents at that later time, the "self" referent is readministered and the retest reliability measure is taken from the correlation between the "Self I" and "Self II" referents. It should be noted that the same photograph is used as was used in the earlier administration. (All Ss are promised, when their photographs are taken initially that they will be given the photograph when the examination is finished a few weeks later.) For purposes of control and rapport, it is also important that the same examiner readministers the retest and that the retest be done in the same room which was used earlier.

The procedure yields a "self as subject" score, "self as object" score, and scores for each of the referents taken singly. The "object" score is obtained by summing across the mother, teacher, and peer referents. (A more detailed examination of the relationships between these referents will be presented in a later section of this paper.)

Instructions to Subjects and Administration Procedures

Prior to photographing S the following standard instruction should be given by E:

"Well now, we're going to take a picture of you. Get ready...When I count to three I'll snap your picture. Are you ready now? 1, 2, 3..."

(Notice that no instruction to "smile" etc. has been included. This is purposefully left ambiguous in order to obtain a spontaneous facial expression, and is especially important since giving this instruction would clearly bias responses to the happy-sad item.)

After the exposure has been made, E waits fifteen seconds, then pulls the developed print from the developer compartment of the camera. During this time interval, E may speak with S to establish rapport. After fifteen seconds, E says to S:

"Well look at that (pointing to print). That's a picture of you. That's a picture of (child's name). Isn't this a nice picture of (child's name). This is really you because you are (child's name) and there you are in the picture."

(E points to S's image in the photograph.)

To ascertain the effectiveness of the induction, E then asks S:

"Can you tell me who that is in the picture?"

(E must obtain a response indicating that S knows that it is he in the photograph; either "That's me," or child states his own name or simply points to himself. If S does not recognize himself in the picture E repeats induction above. E must obtain a statement from S indicating that he recognizes himself in the picture before proceeding further.)

E seats S at a table suitable in height and size for a young child, and places the photograph on the table top, directly forward of S and beneath his head in about the same position as a dinner plate is usually placed. Since the recently developed print will tend to curl, it will be useful to use two small pieces of tape at the top and bottom edges

of the print, fastening it to the surface of the table. E should seat himself directly opposite S at the table and then say the following:

"Now I'd like to ask you a few questions about (child's name)."

E then points to the picture, placing his own finger on it and proceeds to ask the set of questions in the context of the "self" referent. E must restate the introductory stem before asking each question and must point to the photograph each time he asks a question.

"Now can you tell me, is (child's name) happy or is he sad?"

E proceeds through all items in the "self" referent in this manner. It is important that E explicitly point to the picture before asking each question, thereby repeatedly directing S's gaze and attention to it. It is also important to continually restate the question stem in the objective case: "Is (child's name)...happy or is he sad?" This procedure establishes a set in which the child is induced to "stand back from himself," and to gain a perspective of himself as an "object" in the photograph. This should also assist S to assume the role of another toward himself.

After responding to all items on the "self" referent, the "mother" referent is introduced by E:

"Now that was very good (child's first name). I'd like to ask you a few more questions. This time I'd like to ask you a few questions about (child's name) mother. Can you tell me...Does (child's name) mother think that (child's name) is happy or sad?"

E proceeds through the entire set of items in the "mother" referent context. Again, E must point to the photograph and repeat the appropriate stem before asking each question. The fourteen items asked under the "mother" referent are identical to those asked under all other referents. Only the referent itself is to be varied.

At this point, S will have completed two referent scales. The "self" referent scale, and in the case illustrated above, the "mother" referent. Total administration time for these two referents, including time spent in taking the picture, should run to approximately 15 minutes. Since there is a problem of limited attention span among young children we have found it useful to stop at this point. E then says to S:

"Well we'll stop now and I'll come back in a few weeks, when I'll ask you a few more questions and then I'll

give you your picture to keep. It will be all yours. You can do whatever you want to with it. You can bring it home, or keep it for yourself, or you can throw it away. It will be all yours."

After examining all Ss, E leaves and returns three weeks later. He continues with each S, preferably in the same room, seated at the same table and with the room arranged as it was before. E begins the testing session II saying:

"Well hello there. Do you remember looking at your picture with me a few weeks ago? Well here is your picture again. I just want to ask you a few questions and then I'm going to give you your picture to keep for yourself, just as I promised. You can do whatever you like with it. It will be for you to keep."

E then places picture on table, fastens it to surface, as before, seats himself opposite S and begins administration of Part II.

The first referent to be administered to S should be a repeat of the "self" referent given three weeks earlier. The procedure to be followed should duplicate, as completely as possible, the earlier administration. Following this procedure is of crucial importance since the test-retest reliability measure will be taken between responses to the first "self" referent and responses to the second, administered three weeks later.

On Test Session II, it will be necessary to administer the "self" referent in the first position, e.g., before either of the remaining two referents ("teacher" or "other kids"). This procedure should be followed precisely since the reliability estimate is taken on the "self" referent and it is especially desirable to free responses to this referent from as much error variance as possible. Thus, administering the "self" referent in either the second or third position may refresh the child's memory of his previous responses to the items, and since it would be difficult to determine the extent to which responses were so affected, uncontrolled error variance in retest data would presumably be increased.

After completing the first referent, E administers the remaining two referents, e.g., the "teacher" and the "other kids" referent, again following the same procedure.

Upon completion of the five referents ("mother", "teacher", "other kids", plus "Self I" and "Self II") the examination is terminated. E

should thank S warmly, present him with the photograph, and again reinforce the value of the picture by saying:

"Well now, this picture is for you to keep, just as I promised. Here it is; remember you can do whatever you like with it; you can keep it for yourself or show it to your mother or teacher or whatever you like."

Scoring Procedures

The following scores are obtainable from the measurement procedure:

1. Self I referent score--represents the "self as subject" dimension of self concept. Possible scoring range 0-14 points.
2. Mother referent score--represents the extent to which S perceives his mother as seeing him positively or negatively. Possible scoring range 0-14 points.
3. Teacher referent score--represents the extent to which S perceives his teacher as seeing him positively or negatively. Possible scoring range 0-14 points.
4. Other kids referent score--represents the extent to which S perceives his peers as seeing him positively or negatively. Possible scoring range 0-14 points.
5. Self II referent score--this measure is taken three weeks after S is given Self I referent and it is to be used as the test-retest reliability estimate for the self-referent.
6. Combined mother plus teacher plus other kids referent score--represents the "self as object" score and the overall extent to which S perceives these significant others as seeing him positively or negatively. Possible scoring range 0-42 points.

In addition, it is possible to record and compute the number of items to which as S was unable to respond, in order to determine:

1. the extent to which Ss do not fully understand the bipolar pairs, and/or,
2. the extent to which Ss may not have formed impressions of themselves or of their characteristics.

Where this occurs, the scores for each referent must be adjusted to reflect a "no response." This can be done by using a ratio score rather than an absolute score. The ratio score should be defined as a ratio of the total number of positive responses to the total number of items responded to within a referent. It should be mentioned that for

comparative purposes, the use of a ratio score for any S within a given group would necessitate the computation of ratio scores for all Ss within that group.

Two further issues must be raised before we examine the results of a pilot investigation with this procedure. The first issue centers around use of the "either-or" item format as opposed to use of a Likert-type rating scale format.

It is quite realistic to argue that people tend to think of themselves, their capabilities and their incapacities in differentiated rather than in all or none ways. This would seem to suggest that use of the either-or item format would be likely to result in measurement error due to the forcing of responses into a limited response range. However, while it is true that older children and adults can readily differentiate points between extremes, it does not appear to be easily done by very young children. In pilot testing this procedure with four-year-old children, we have found a notable inability among them to differentiate intermediary points between polar opposites. We have observed, instead, that children at this early age generally have a greater facility for responding to questions which are simply stated in "either-or" fashion. Additionally, the technique is a highly repetitious one. Since limited attention span is a real problem of measurement among young children, an important criterion to be met in the design of measurement procedures for this age group should be overall task and item simplicity.

There is a final issue which ought to be considered before looking at the pilot results. This issue is concerned with the use of a photograph as an induction for promoting self "objectivity" as opposed to the use of some other medium such as a mirror, from which a mirror image can be obtained. On first thought, it would seem that a mirror could quite easily be substituted for the photograph. However, there are several reasons which suggest that use of a mirror image would be a decided disadvantage in the present technique.

First, a photograph is a permanent record of an individual's appearance at a given moment in his history. The record itself is an immutable one, but the individual's perceptions of the content of that record are subject to manipulation. Thus, by directing attention to a specific "object" in the photograph and by varying the conditions under which it is to be viewed, differential perceptions of that "object" can

be induced within an individual.

Secondly, the "scenery" present in a photograph can be manipulated, or oppositely, can be made constant simply by composing the photograph with a precisely defined background for all subjects whose pictures are taken. This type of control on picture composition, together with the use of standard instructions for posing provide measures of stimulus control which are simply not obtainable when using a mirror image. The mirror image, remember, is essentially unstable. It is markedly affected by changes in facial expression, posture and mood. Moreover, movement of a mirror by just a few degrees and change in facial orientation to a mirror both result in changed background and composition.

In short, use of the photograph provides highly desirable control for research purposes. With the exception of the image of the subject himself, the stimulus is a constant one across Ss. In addition, use of the photograph permits a measure of response reliability at a later time, based on precisely the same stimulus as was used earlier. Since retest with the same measure is an acknowledgeably rigorous measure of reliability this would be sacrificed by substituting a mirror image for the photograph.

Finally, we must note that the photograph serves as an incentive and appears to motivate young children to participate actively in the procedure. Since the child is repeatedly told that he may keep the photograph and do whatever he would like to with it after the examination, anticipation of owning the photograph seems to become an incentive. In our pilot study we have found that the promised photograph generally has a powerful effect on maintaining the interest of children throughout the procedure. Obviously the incentive would be absent if a mirror were used in place of the photograph.

Let us now examine results of a pilot study in which this procedure has been used.

The Pilot Study

The assessment procedure which has been described in the preceding pages was administered to three independent samples of four-year-old children (Ss) in New York City. Sample I (N=17) was taken from two prekindergarten classes which were a part of a preschool enrichment-intervention program run by the Institute for Developmental Studies, New York Medical College. Both classes were conducted in public schools

located in depressed areas of New York City. (The schools were located in East Harlem and the Lower East Side sections.) Both classes were composed predominantly of Negro children with the exception of several non-English speaking white Puerto Rican children in one of the classes. These children were excluded from the pilot study. The remaining Ss were all from lower SES families, as estimated from the educational and occupational attainment of the main support in each S's family.

Sample II (N=21) was taken from a day care center in the East Harlem section of New York City. All Ss in this sample were Negro, between four and five years of age, and came from lower SES backgrounds, as determined by occupation of main support in each family. Children in this sample were deposited at the day care center early each morning, and were picked up at 4:00 P.M. by either a parent or guardian.

Roughly 60% of the Ss in Samples I and II came from homes in which one parent was absent. Parental transiency and separation were the most commonly given reasons for absence. Most often fathers were absent, but there were a few cases where a child's mother had left the family. Ss in Sample II received custodial care, nominal prekindergarten instruction and a hot meal each day. Ss in Sample II were all in a single classroom group which was under the supervision of a Negro teacher who was assisted by a small staff of community aides. The procedure was administered to all children in this group. By way of contrast, Ss in Sample I were in "enrichment" classes which were supervised by a white teacher and assistant teacher.

Sample III (N=36) was obtained from an old and established community center in the heart of New York City's "silk stocking" district. S's were all white and came predominantly from upper-middle SES family backgrounds, as determined from education and occupational level of the main support in each family. Almost all of these children came from families of Jewish religious background. There were no instances of family instability in this sample. Again, Ss were four to five years of age at the time they were examined and they were participating in a five-day-a-week private prekindergarten nursery school program. Ss were taken from three different classes, each staffed by a white teacher and assistant.

The procedure was thus given to 38 four-year-old lower SES children and 36 upper-middle SES white children of the same age.

Results

Table 2 gives the means and standard deviations on each referent and for the "self as object" score in each sample. Results of t-test comparisons between these means are presented in Table 3.

Table 3 reveals that the two samples of lower SES Negro children did not differ from each other on any of the referent scores or on the composite "self as object" score. The mean differences between Samples I and III did however reach significance on both the "self as subject" score and on the composite "self as object" score. Since the two lower SES Negro samples were in no way different from each other these samples have been pooled in order to enlarge the overall number of Negro Ss and thereby make the Negro and white samples more comparable in size.

Table 4 presents a comparison of means obtained by Negro and white Ss on the "self as subject" referent and on the "self as object" score.

Table 4 reveals that Negro Ss tended to perceive themselves (self as subject score) in less positive ways than did white Ss. Negro Ss also saw significant others as seeing them less positively than did white Ss. It is interesting that while these differences between Negro and white Ss reached statistical significance, the means for both groups were rather high and the distributions tended toward positive skewness. Examination of the standard deviations in Table 4 indicates that white Ss perceived themselves and perceived significant others as seeing them in uniformly more positive ways than did the Negro children. In the sample of white children the variance on the "object" score (5.26^2) was significantly smaller than the variance found in the Negro sample on the same score (8.98^2). Parallel differences in variability between Negro and white Ss were found on the "subject" score. These differences are due to a greater tendency toward bimodality in the sample of Negro Ss. While there were only rare departures from high positive perceptions of self and perceptions of others' perceptions of self among white children, roughly one-quarter of the Negro Ss reported that they saw themselves (subject) and saw others as seeing them (object) in notably negative ways. This difference between samples is a significant one ($\chi^2=7.50$, d.f.=2, $p < .02$) using the self as subject referent scores as bases of comparison between Negro and white Ss. Three score levels were distinguished for this analysis: 0.0-9.5, 9.6-12.5 and 12.6-14.0. When one inspects the cell frequencies in this χ^2 analysis it is apparent that the major difference between Negro and white Ss is that the Negro

Ss scored in the lower part of the distribution far more frequently than did white Ss. Conversely, the number of white Ss falling into the highest score level was far greater than chance expectation, while the frequency of Negro Ss scoring in this level was far under chance expectancy. Figure 1 presents the cut-off points, observed and expected frequencies and marginals used in this analysis. Some caution should be exercised in the interpretation of this analysis since the expected frequencies in two cells are slightly under the minimum expected cell frequency requirement of five needed in this type of analysis.

Figure 1 provides a closer look at the positive skewness found in both samples and at the bimodality found in the Negro sample. These differences can be further explored by comparison of the item frequencies for the "self as subject" referent within each sample. Table 5 presents item frequencies for each of the fourteen descriptive pairs which appeared in the "self as subject" referent.

Table 5 reveals that the overall differences between Negro and white Ss on the "self as subject" referent were largely due to differences on four items. A significantly larger proportion of Negro than white Ss perceived themselves as:

1. sad rather than happy;
2. stupid rather than smart;
3. sickly rather than healthy; and
4. not liking the appearance of their faces, as opposed to perceiving their faces favorably.

On the other hand, Table 5 reveals that there were no differences between Negro and white Ss on such dimensions as clean--dirty, good looking--ugly, or on sociability items (Items 4, 5, 7, 10).

Let us now direct attention to the distribution of scores on the "self as object" measure for both Negro and white Ss. (This score was obtained by summing the number of positive responses to the "mother," "teacher" and "peer" referents.) A greater proportion of Negro than white Ss perceived these significant others as seeing them in negative ways. This difference between Negro and white Ss reached statistical significance ($\chi^2=7.50$, d.f.=2, $p<.025$)*

* The observed frequencies in each cell on the "self as object" score are exactly the same as found on the "self as subject" score. Since the χ^2 analysis for this variable duplicates the six celled table presented in Figure 1, it will not be presented here. (Contd.)

This χ^2 analysis reveals only that there are general differences in score distribution between Negro and white Ss on the "self as object" score. To more fully understand the reasons for this difference it will be useful to determine the specific referent(s) and then the items which most distinguish between Negro and white Ss. Re-examination of Tables 2 and 3 reveals that of the referents which are included in the "self as object" measure, the strongest difference between Negro and white Ss is to be found on the "teacher" referent. The score distributions for Negro as opposed to white Ss on the "teacher" referent are given in Figure 2.

This analysis reveals that there were significant differences between Negro and white Ss with regard to the ways in which they perceived their teachers as seeing them. ($\chi^2 = 7.26$, d.f. = 2, $p < .05$). Figure 2 indicates that more Negro than white Ss perceived their teachers as seeing them in negative ways and that more white than Negro Ss perceived their teachers as seeing them in highly positive ways. Examination of the frequency of positive and negative responses made to each item within the "teacher" referent for Negro as compared to white Ss indicates that the difference in score distribution between these two groups comes primarily from three items which significantly distinguished between the two samples (see Table 6).

Five additional items tended to distinguish between the two samples but differences on these items did not quite reach the .05 level of significance. These items are nevertheless identified in Table 6 since the overall difference between Negro and white Ss on the "teacher" referent is a result of the pooled effects of these item differences.

Table 6 reveals that Negro Ss, more frequently than whites, reported their own perceptions of their teachers' perceptions of them as:

1. sad rather than happy;
2. frightened of a lot of people rather than not frightened of a lot of people; and,

(Contd.)

It is interesting that the distributions for each variable are identical. This probably stems from the degree of correlation between the two referents. To reiterate, the cutoff points on the "self as subject" referent were 0-9.5, 9.6-12.5 and 12.6-14.0. On the "self as object" measure, the cutoff points were 0-25.8, 26.9-37.9 and 38.0-42.0. The sole criterion for setting these cutoff points in the latter measure was that of making them parallel to the cutoff points defined for the "subject" referent.

3. not liking their (S's) facial appearance as opposed to liking the appearance of their faces.

In addition, Negro Ss, more frequently than whites, thought their teachers saw them:

1. as stupid rather than smart;
2. as sickly rather than healthy;
3. as not liking to talk a lot rather than as liking to talk a lot; and
4. as frightened of many things as opposed to being not frightened of many things.

Negro children also reported that they perceived their teachers as not liking the appearance of their clothing more frequently than did white Ss ($>.05p <.10$). It should be noted again that while these differences between Negro and white children do appear, they occur within the context of positively skewed distributions in each sample. The evidence presented in Table 6 clearly indicates that a major proportion of Ss, regardless of their racial characteristics, perceived their teachers as seeing them in generally positive ways. It is within the Negro sample, however, that a small, although not insignificant, group of Ss consistently reported their teachers' perceptions of them as being negative. This result closely parallels the differences which were found between Negro and white Ss on the "self as subject" measure. It can be accounted for by the high correlation between one's perceptions of himself and his perceptions of others' perceptions of him.

In addition to making comparisons between Negro and white Ss on the self concept referents, it has been our concern to test the reliability of the procedure and to thereby obtain a measure of the stability of four-year-olds' perceptions of self, over a given time period. The "self as subject" referent was readministered to Ss three weeks after they were initially examined. Examiners gave the retest to the same Ss whom they had previously examined.

The retest was conducted in the same room, which was arranged in exactly the same way as on the first administration. Importantly, the same photograph as had been used earlier was used as the induction, and Ss were given this photograph after having been examined, as promised earlier.

Table 7 presents the Pearson product-moment correlations between the "self as subject" referent score and its retest which was administered three weeks later.

Table 7 reveals that the self as subject measure has equally high reliability among both Negro and white four-year-old Ss. This table also suggests that a fairly high level of stability characterizes young children's perceptions of self over short periods of time.

Table 7 indicates that Ss who reported negative perceptions of self on the first administration of the "subject" referent also tended to report negative perceptions of self on the retest administered three weeks later. Similarly, children who perceived themselves in predominantly positive ways at Time I tended to report positive perceptions of self at Time II.

An additional concern in the construction of the present measure is to determine the extent to which young children perceive themselves as they perceive significant others" as seeing them. In other words, to what extent are young children's perceptions of themselves congruent with their perceptions of others' perceptions of them? An answer to this question can be obtained from the data presented in Tables 8, 9, and 10. These data are presented as correlation matrices for the three separate samples of Ss. While there were no mean differences between the two samples of Negro children on any of the referent scores, it was noted that there were differences between them in terms of the degree of congruity between perceptions of self and perceptions of others' perceptions of self. For this reason, the correlation analyses were carried out separately for each sample of Negro children whereas these samples were pooled in previous analyses.

These matrices reveal that there is a generally high level of congruity between Ss perceptions of themselves and their perceptions of significant others' perceptions of them. There are, however, some

interesting divergencies from this tendency. Specifically, one notes differences between the samples with regard to the magnitude of correlation between the "self as object" components and the "self as subject" score. These coefficients are considerably higher in Sample I than in either Sample II or III.

There are at least two ways of accounting for the differences in correlation between the "significant other" referents and the "self as subject" referent in the three samples. On the one hand, the higher correlations found in Sample I could reflect the possibility that these Ss were less able to differentiate perceptions of them held by others, from their own perceptions of self, than were Ss in either of the other samples. An equally likely alternative, however, may have simply been greater congruence or integration of self percepts in this sample than in either of the other two samples. There is no clear-cut answer to this question apparent from the data. There is some suggestion, however, that the latter alternative is the more plausible one since the appearance of differences in correlation between these samples does offer some support for the position that four-year-old children can differentiate between referents in the context of the present assessment technique. It is important to reiterate that Ss received several fairly strong inductions to assist them to assume the perspective of "significant others" toward themselves. Ss were explicitly and repeatedly required to report their perceptions of their mothers', teachers', and peers', perceptions of them. The question stem which contained the identification of the referent was restated by E at least 14 times in each referent. In addition, each time the question stem was asked E made pointed reference to the photograph of S directly beneath his eyes.

Summary and Discussion

Thirty-eight four-year-old lower SES Negro Ss and thirty-six upper-middle SES white Ss of the same age were given the Brown-IDS Self Concept Referents Test. This technique was specifically designed to assess the dimensions of self concept held by young children.

The procedure is an operational measure of G. H. Mead's (1956) theory of self-awareness. The basic assumptions on which the assessment technique rests are that:

1. Concepts of self are largely determined by social-perceptual processes; and
2. One's self concepts are formed not only from his perceptions of self (self as subject), but are also reflections of his perceptions of "significant others'" perceptions of him (self as object).

Accordingly, Ss were induced to characterize themselves on fourteen descriptive dimensions from four different perspectives (referents):

1. S, as he saw himself;
2. S, as he perceived his mother as seeing him;
3. S, as he perceived his teacher as seeing him; and
4. S, as he perceived other kids as seeing him.

Each S was presented with a Polaroid photograph of himself (against a standardized background and with standard instructions for posing) to which he was induced to refer when given descriptive pairs within each of the referent categories. This procedure was developed to induce Ss to perceive themselves as social "objects."

The procedure yields summative scores for each referent. By summing across the "mother," "teacher," and "peer" referents, a measure of the favorableness of "self as object" perceptions was obtained for each S. In addition, a measure of the favorableness of "self as subject" perceptions was obtained directly from Ss responses to the self referent. Descriptive pairs were identical for each referent and responses were scored 1 if positive or 0 if negative. The scores obtained for each S were derived by summing positive responses within each referent. In all cases, the higher the score obtained, the more favorable were S's self perceptions.

A retest, using the same form, was given after a three-week interval to determine the reliability of the measure.

Ss were promised that they would be given their photographs to keep after completing the examination. Since the same photograph was used in the first examination as in the retest, Ss received their photographs, after having completed the retest.

The following major results were obtained:

1. There was a relatively high level of reliability in the perceptions of self held by Negro and white children over

- a three-week interval (.76 for white Ss, .71 for Negro Ss.)
2. There was a notable tendency for children in this age group to perceive themselves (self as subject), and to see significant others (self as object) as seeing them in generally positive ways. However, Negro Ss scored significantly lower, on the average, than white Ss on both the "self as subject" referent and the "self as object" measure. On the "self as subject" referent, Negro Ss, significantly more often than white Ss, perceived themselves as:

- a. sad rather than happy;
- b. stupid rather than smart;
- c. sickly as distinguished from healthy; and
- d. not liking their own facial appearance as opposed to evaluating their facial appearance favorably.

On the "self as object" measure, Ss' perceptions of their teachers' perceptions of them most clearly distinguished Negro from white Ss. Negro Ss, more frequently than whites, perceived their teachers as seeing them in negative ways while white Ss quite uniformly perceived their teachers as seeing them positively. Specifically, Negro Ss, more frequently than whites, saw their teachers' perceptions of them as:

- a. sad rather than happy;
- b. frightened of many things and of many people; and
- c. sickly rather than healthy.

In addition, Negro Ss perceived their teachers as:

- e. not liking their facial appearance; and
- f. not liking the appearance of their clothing;

more frequently than did white Ss. The latter two items did not significantly distinguish between Negro and white Ss, but there was a tendency in this direction ($>.05$ p $<.10$).

There were no significant differences between Negro and white Ss with regard to their mothers' or their peers' perceptions of them. Both Negro and white Ss reportedly held high positive perceptions of the ways in which they were seen by each of these referents.

3. There were generally high positive correlations between children's perceptions of self and their perceptions of significant others' perceptions of them. Ss who perceived themselves (subject) positively also tended to see others as perceiving them positively. Ss who perceived themselves negatively also tended to perceive others as seeing them in negative ways.

These results must be evaluated with some caution for several reasons. Although the measurement procedure eliminates the need to impose subjective interpretations on responses, some other problems have arisen. Briefly, these are:

1. The effects of social desirability on S's responses. In future research it would be useful to either:
 - a. obtain an independent measure of the extent to which responses to items made by four-year-old Ss are determined by their knowledge of what is socially acceptable; or
 - b. construct item pairs in such ways as to eliminate bias due to social desirability.

In this connection E noted that white Ss generally had greater response latencies on many of the items than did Negro Ss. This may be an indication that the self reports made by white Ss were more carefully considered than were the more spontaneous responses generally made by Negro Ss.

2. The possible introduction of response bias due to the fact that white (male) examiners were used in the present study. There are at least two arguments which lead to the expectation that E's racial characteristics will have a strong effect on Ss responses. The first argument is based on social desirability. It has been demonstrated that responses made by six-year-old Negro Ss to white examiners are significantly different from responses made by the same Ss to Negro examiners (Trent, 1954). This investigator found that responses made by Negro Ss to Negro examiners, on a measure related to personality, were

significantly more favorable to Negroes than were responses given by the same Ss to white examiners. On the other hand, there is some evidence (Rosenthal, 1963) which suggests that responses given by Negro Ss to white examiners will be influenced by "expectancy." Expectancy has been defined as the tendency to respond in accord with the expectations which one supposes another has for him. In this case, it is not infrequent that Negro Ss perceive themselves as having lower status than whites in Negro-white contact situations (Katz, 1964). If this is true, then responses made by Negro Ss to white examiners in psychological testing situations should, in some extent, reflect these perceived status discrepancies. Under the influence of negative expectancy, it is not unreasonable to predict that Negro children will respond less favorably to questions about themselves as a function of the extent to which they perceive differential behavior as being expected of them.

It is perplexing that these arguments about the effects of social desirability and "expectancy" on self reports made by Negro Ss to white examiners lead to contradictory predictions. In one case social desirability may induce Negro Ss to give more favorable self reports; alternatively "expectancy" may operate to make self reports given by Negro Ss to white examiners less favorable. Either way, the result is confounding. In future research it would be important to vary the racial and sex characteristics of examiners to determine the extent to which differences are produced by these factors.

3. A third major problem in the present study stems from the fact that Ss came from two sharply different populations (lower SES Negro as compared to upper-middle SES white). The differences in self concept which have been reported are thus confounded by racial characteristics and by SES level. At the present time, differences between these samples

cannot, with confidence be attributed to either of these two variables. Further research must be undertaken in which comparisons are made between the samples reported on in this paper and additional samples of middle SES Negro children and lower SES white children.

The flood of recent literature on differences in self concept between Negro and white children suggests, but does not reliably document the extent of these differences or the dimensions on which they occur. The technique which has been outlined in this paper and the results of the pilot study indicate, with acceptable reliability, some specific dimensions on which differences in self concept between Negro and white children occur.

The procedure described above can be modified for use with older or perhaps even younger children by alteration of the descriptive dimensions and/or by changing referents. Modifications such as these would contribute to making the procedure more applicable for use with different samples.

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Table 1

Items and Corresponding Score Values
For Fourteen Descriptive Pairs Given Under Each Referent

<u>Item</u>	<u>Score*</u>
1. Happy-sad	1, 0
2. Clean-dirty	1, 0
3. Good looking-ugly	1, 0
4. Likes to play with other kids-doesn't like to play with other kids	1, 0
5. Likes to have own things- likes to have other kids things	1, 0
6. Good-bad	1, 0
7. Likes to talk a lot-doesn't like to talk a lot	1, 0
8. Smart-stupid	1, 0
9. Scared of a lot of things- not scared of a lot of things	1, 0
10. Scared of a lot of people- not scared of a lot of people	1, 0
11. Likes the way clothes look- doesn't like the way clothes look	1, 0
12. Strong-weak	1, 0
13. Healthy-sick	1, 0
14. Likes the way (my) face looks-doesn't like the way (my) face looks	1, 0

*Note: Score values parallel order in which adjectives are presented.

Table 2

Means & Standard Deviations for Three Samples on Six Self Concept Referents

Referent	Sample I ¹		Sample II ²		Sample III ³	
	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>
Self I (Self as subject)	10.53	2.96	12.09	2.26	12.67	1.40
Mother	11.06	3.77	11.24	2.47	12.89	1.67
Teacher	10.59	3.37	11.71	3.45	13.03	1.59
Peers	11.06	3.34	11.24	3.19	12.08	2.83
Self II	10.76	3.43	11.95	2.61	12.86	1.68
Self as Object ⁴	32.71	9.84	34.19	8.58	38.00	5.26

¹Sample I (N = 17) Lower SES Negro children in prekindergarten enrichment program

²Sample II (N = 21) Lower SES Negro children in day care center

³Sample III (N = 36) Upper-middle SES white Jewish children in nursery school

⁴Combined mother, teacher, and peers referent score

Table 3

Results of t-Test Comparisons Between
Three Samples on Five Self Concept Referents

Referent	Comparison		
	$t_{1,2}^*$	$t_{1,3}^*$	$t_{2,3}^*$
	p	p	p
Self as Subject	n.s.	$< .01$	n.s.
Mother	n.s.	n.s.	n.s.
Teacher	n.s.	$< .01$	n.s. ¹
Peers	n.s.	n.s.	n.s.
Self as Object	n.s.	$< .05$	n.s. ²

*Note: Subscripts designate samples as identified in Table 2

¹ $p < .10$

² $> .05$ $p < .10$

Table 4

Comparison of Means for Negro and White Ss

On the "Self as Subject" and "Self as Object" Referent Score

Group	Self as Subject ¹			Self as Object ²		
	$\bar{X}$	S.D.	N	$\bar{X}$	S.D.	N
Negro	11.39	2.63	38	33.26	8.98	38
White	12.67	1.40	36	38.00	5.26	36

¹ $t_{\text{Negro vs. white}} = 2.63, d.f. = 72, p < .01$

² $t_{\text{Negro vs. white}} = 2.79, d.f. = 72, p < .01$

Table 5

Item Frequencies on Fourteen Descriptive PairsComprising the "Self as Subject" Referent for Negro and White Ss

Item	Negro (N=38)		White (N=36)		p*
	+	=	+	=	
1. happy -sad	29	9	36	0	<.01
2. clean -dirty	31	7	28	8	n.s.
3. good looking -ugly	32	6	33	3	n.s.
4. likes to play with other kids -doesn't like to play with other kids	35	3	33	3	n.s.
5. likes to have own things -likes to have other kids' things	28	10	28	8	n.s.
6. good -bad	34	4	34	2	n.s.
7. likes to talk a lot -doesn't like to talk a lot	22	16	27	9	n.s.
8. smart -stupid	32	6	36	0	<.05
9. scared of a lot of things -not scared of a lot of things	29	9	32	4	n.s.
10. scared of a lot of people -not scared of a lot of people	31	7	32	4	n.s.
11. likes the way his clothes look -doesn't like the way his clothes look	33	5	33	3	n.s.
12. strong -weak	34	4	35	1	n.s.
13. healthy -sick	31	7	35	1	<.05
14. likes the way his face looks -doesn't like the way his face looks	30	8	36	0	<.01

* Two-tailed probabilities determined by Exact test

Table 6

Item Frequencies on Fourteen Descriptive Pairs
Comprising the "Teacher" Referent for Negro and White Ss

Item	Negro (N=38)		White (N=36)		p*
	+	-	+	-	
1. happy -sad	30	8	35	1	<.025
2. clean -dirty	31	7	31	5	n.s.
3. good looking -ugly	32	6	32	4	n.s.
4. likes to play with other kids -doesn't like to play with other kids	32	6	33	3	n.s.
5. likes to have own things -likes to have other kids' things	28	10	32	4	n.s.
6. good -bad	32	6	34	2	n.s.
7. likes to talk a lot -doesn't like to talk a lot	23	15	29	7	>.05<.10
8. smart -stupid	32	6	35	1	>.05<.10
9. scared of a lot of things -not scared of a lot of things	28	10	33	3	>.05<.10
10. scared of a lot of people -not scared of a lot of people	32	6	36	0	<.05
11. likes the way his clothes look -doesn't like the way his clothes look	31	7	35	1	>.05<.10
12. strong -weak	35	3	35	1	n.s.
13. healthy -sick	30	8	34	2	>.05<.10
14. likes the way his face looks -doesn't like the way his face looks	30	8	36	0	<.01

* Two-tailed probabilities determined by Exact test

Table 7

Test-Retest Reliability Coefficients
Among Four-Year-Old Negro and White Children
On the "Self as Subject" Referent

Group	Retest Reliability	
	<u>r</u>	<u>N</u>
Negro	.71	38
White	.76	36

Table 8

Intercorrelations Between Self Concept Referents
(Including "Self as Object" Score)* in Sample I (Negro, N=17)¹

Referent					
	(1)	(2)	(3)	(4)	(5)
(1) self as subject (self I)	1.00	.87	.74	.89	.89
(2) mother		1.00	.73	.90	.94
(3) teacher			1.00	.84	.91
(4) peers				1.00	.97
(5) self as object					1.00

¹Values of r significant at $p < .05$ and $< .01$

N-1 = 16, $r_{.05} = .47$, $r_{.01} = .59$

*Since the "Self as Object" score is formed by summing across the mother, teacher, and peer referent scores, all values of r reported in Tables 8, 9, and 10 between the separate scores included in the composite and the overall "object" score have been adjusted for redundancy by use of part-whole correlations.

Table 9

Intercorrelations Between Self Concept Referents
(Including "Self as Object" Score)* in Sample II (Negro, N=21)¹

Referent	(1)	(2)	(3)	(4)	(5)
(1) self as subject (self I)	1.00	.65	.52	.46	.57
(2) mother		1.00	.73	.78	.87
(3) teacher			1.00	.94	.96
(4) peers				1.00	.97
(5) self as object					1.00

¹Values of r significant at $p < .05$ and $< .01$

$N-1 = 20$, $r_{.05} = .42$, $r_{.01} = .54$

*See note Table 8

Table 10

Intercorrelations Between Self Concept Referents
(Including "Self as Object" Score)* in Sample III (White, N=36)¹

Referent	(1)	(2)	(3)	(4)	(5)
(1) self as subject (self I)	1.00	.79	.65	.43	.68
(2) mother		1.00	.76	.47	.80
(3) teacher			1.00	.64	.89
(4) peers				1.00	.88
(5) self as object					1.00

¹Values of r significant at $p < .05$ and $< .01$

$N-1 = 35$, $r_{.05} = .33$, $r_{.01} = .42$

*See note Table 8

Figure 1

Chi² Analysis* of "Self" Referent Score Distribution by Racial Group
(Average score over two "self as subject" referents)

Group	Range 0-9.5	Range 9.6-12.5	Range 12.6-14.0	Total
Negro	7 (4.11)	17 (14.89)	14 (19.00)	38
White	1 (3.89)	12 (14.11)	23 (18.00)	36
Total	8	29	37	[74]

Figure 2

Chi² Analysis* of "Teacher" Referent Score Distribution by Racial Group
(Score on "teacher" referent)

Group	Range 0-9.5	Range 9.6-12.5	Range 12.6-14.0	Total
Negro	8 (4.62)	10 (8.73)	20 (24.65)	38
White	1 (4.38)	7 (8.27)	28 (23.35)	36
Total	9	17	48	[74]

*Note: Entries in parentheses are expected frequencies.